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ABSTRACT

The workings of a simulation model, the Student Flow Model (SPM), designed to trace the flow of students from one enrollment period to another, are described. The model is divided into three major modules. The first is the historical module, which provides the historical base for future projections. The admissions module, the second part of the SPM, projects new students by major or any other parameter the investigator desires (e.g., sex, race, rank in class). The third component is the transition module, which projects future enrollments by taking information from the historical and admissions modules. For the investigation of student attrition, the historical portion of the SPM appears to be most useful. It enables the investigator to tell where the students are going and how long they take to get there. If they drop out, the model tells their class level and major and whether they reenter at a later time. It also allows for the pooling of several time frames to arrive at an average transition percentage, such as is used for making projections of enrollments. The basic data needed for the SPM includes a unique identification number for each student, class identification, academic program, and the term the data are collected. Crossover tables are built that combine a major into a particular broad program category. (Author/LBH)

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ED131818

THE STUDENT FLOW MODEL AS A TOOL
TO ANALYZE THE STUDENT DROPOUT

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NATIONAL INSTITUTE OF
EDUCATION

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As overall student enrollments in higher education begin to level off, the problem of student attrition is becoming more evident. When higher education enrollments were increasing at an ever accelerating rate, the magnitude of student attrition was masked to the general observer. If projections by the Illinois Higher Board and others of a stable or slowly declining enrollment during the 1980's are true, the problem of student attrition will become more important as we approach the 1980's.

Tied in closely with the problem of student attrition is the cost of education. As we are now measuring costs, the amount of student attrition is significant only to the degree that overall student credit hour production is affected. However, there are indications that educational costs may be based on outcome measures in the future. Thus, rather than calculating costs on a student credit hour basis, the standard might be the cost per degree in a given discipline. The calculation of costs by program rather than by academic or administrative centers, in public institutions, may be a step toward the use of outcome measures in Illinois. The relative position of institutions, in terms of unit cost, could well change if we calculated costs on the basis of program completers.

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In the academic year 1972-73, Western participated in a pilot study for the American Council on Education. The purpose of this study was to determine whether the data from their annual survey of entering freshmen and other ACE studies could be better utilized by individual institutions. Out of this study came the finding that Western had a slightly higher than expected attrition rate among students who entered as freshmen. The institution was concerned, and the office of Institutional Research and Planning began to explore ways to investigate this problem. At about the same time, the National Center for Higher Education Management Systems (NCHEMS) at WICHE, began to disseminate information on a new model known as the Student Flow Model (SFM). Although the initial target date for this model was the Fall of 1973, it did not become available until the Summer of 1974.

As originally conceived, the SFM was to be used as an input into the Resource Requirement Prediction Model (RRPM) to aid in making projections of institutional resource needs, although it apparently has not been used extensively in this manner. The model is divided into three major modules. The first is the historical module which provides the historical base for future projections. It is this aspect of the SFM which appears to have the greatest potential value. The admissions module, the second part of the SFM, projects new students by major or any other parameter the investigator desires (such as sex, race, rank in class, etc.). The third component is the transition module which projects future enrollments by taking information from the historical and admissions modules.

For the investigation of student attrition, the historical portion of the SFM appears to be most useful. A base or source population is first identified.

It may be all students enrolled at the institution during a term, or it may be a certain classification or type of student, such as all new freshmen or all males. The restrictions on the parameters are only limited by the information available in the information system of the institution. After identifying the target group, the model is then used to examine the group over several time frames, such as each fall term over a period of four years. The model will then produce a record of the students as they flow from one time period to another. In this way the investigator can not only determine whether the students are still enrolled, but can also tell how quickly they are progressing through their degree programs by looking at their class level and the extent to which they change from one major to another.

In effect we are able to tell where the students are going and how long they take to get there. If they drop out, the model tells us their class level and major and whether they re-enter at a later time. If the researcher is interested in the transition from major to major or from major to dropout, the model allows for the pooling of several time frames to arrive at an average transition percentage. This is what is done when the SFM is used for making projections of enrollments.

The basic data needed to drive the student flow model is quite minimal. Each student must be identified by a unique identification number. Tied to their record are class identification, academic program, and the term the data is collected. Crossover tables are then built which combine a major into a particular broad program category. Beyond these basic items any number of variables can be added at the discretion of the institution.

There are seven reports which are normally produced in any run of the history module of the SFM. The first three describe the population that we are dealing with, while the last four show the transition of the students by major and by broad program category from one time period to another.

Reports One and Two describe the target population on the basis of some pre-determined characteristics such as sex, race, institutional origin or high school rank. In this example, (Appendix A) ACT composite scores were used. For each score the entering group is broken down by broad program category (college) and by major and class. As the target population in this example was entering Freshmen, all class levels are Freshmen. It can be seen that 19 of the students who entered with an ACT score of 22 were Biology majors. This accounted for 5.78% of the 329 new freshmen with ACT composite scores of 22. Report Two (Appendix B) presents the same information as Report One except rather than detail the target population by major, they are broken down by the broad program category (college) and by class.

Report Three distributes the entering students for each class and college by major. Since the students selected in this analysis entered as new freshmen, they appear under "FY71-72." For example, 920 students in the Fall of 1971 entered as freshmen in the College of Arts and Sciences. Of these, 198, or 21.40% declared majors in Biology (Appendix C). The numbers under FY73-74 are re-entry students who were originally Freshmen in the Fall of 1971, but who dropped out and re-entered later. In this example they re-entered as Freshmen in Political Science. Three students are listed as entering Sophomores in 71-72. The class standing of the entering students is determined at the end of the term. There were three freshmen students who entered the Fall of 1971 who were classified as

sophomores at the end of the first term. In the Fall of 72 one student re-entered as a sophomore in Arts and Sciences, and in the Fall of 73 twelve students re-entered as sophomores. This report will produce a listing for every class and college. Report Three provides the basis for transition reports four through seven.

Report Four shows from where a student came in one time period, to where he went in a second time period. The example in Appendix D shows students who were classified as Freshmen in Biology. For example, 97 of the 198 students who were classified as Freshmen Biology majors in 1971-72 were still Biology majors a year later. Of the original 198, sixty, or 30.30% dropped out of school permanently. In the exit category, if any of the students had received a degree they would have been classified as "exiting-undergraduate degree." However, since the example is for freshmen biology majors this would not appear at this time. This report gives the transition for each time period under examination. In this example they are Fall 71, Fall 72, Fall 73, and Fall 74.

Report Five is a shortened version of Four. It shows the transition for a given class and college from one final period to another (Appendix E). For example, of the 920 students who started as Freshmen in Arts and Science, 567, or 61.70%, were still enrolled in the College of Arts and Sciences in the Fall of 1972. This report allows for a broad overview of the trends in student enrollment. However, it does not allow the investigator to determine the individual transition that Report Four does. The key to interpreting this report as well as Report Four is to look at the word to the left of the class and college designation. If it is "from" then we know that we are dealing with the "from 71-72 to 72-73" grouping and the date on the top is the controlling factor. In

reports Four and Five the last column on the right would always be blank except in the exiting category for those students who were here in the Fall of 1974 and exited at the end of the quarter.

Reports Six and Seven are the reverse of Reports Four and Five. These reports are the "to" flow (Appendix F). In the example, 198 students went to Freshmen Biology from new students in Fall 1971. The key to interpreting these reports is the year under the "to." For example, 97 students went to Sophomore Biology in Fall of 1972 from Freshman Biology in the Fall of 1971. Report Six shows where students in a given major come from and aggregates the exiting students to indicate when and from what class and major they either permanently or temporarily exited. Report Six (Appendix G) gives an illustration of those students who temporarily and permanently exited. For example, 38 students who were enrolled in the Fall of 1974 dropped out after that term (note that the "to" date is not applicable when dealing with the exiting category in Report Six). Report Seven is the same as Six except the students are summarized only by class and College. Appendix H shows that the College of Arts and Sciences had 920 students enter in the Fall of 1971 as new students. Of the original group, 537 were classified as sophomores in Arts and Sciences in the Fall of 1972. By using both reports Five and Six the investigator can trace the flow of any given major either from where they came or to where they went.

Up to now we have dealt primarily with the flow model in terms of following students from one time period to another as they change class and major. We have made preliminary runs utilizing other parameters such as grade point average. Utilizing the model in this way allows the investigator to determine if drop-outs are proportionately greater from one grade point average than another. A similar

analysis could be made on the basis of sex, race, ACT scores, etc. The flexibility of the historical module in terms of establishing parameters to be investigated is one of its most attractive features.

A preliminary attrition study was initiated in the Fall of 1975 utilizing the Student Flow Model. The Fall 1971 class of 2943 new freshmen were selected as the target population. At the end of each subsequent Fall quarter the history module of the SFM was utilized to look at the Fall 1971 Freshman class to determine their progress through the institution. A cursory analysis of the SFM shows a substantial change in major from the initial investigation. For example, in the Fall of 1971 one hundred ninety-eight students indicated Biological Science as their major. By the Fall of 1972 only 105 of them still indicated a major in Biological Sciences, 53.0% of the original group. However, there was a total of 139 majors in Biology in Fall of 72 or an inflow of 34 majors from other programs.

The attrition of the students in this class is illustrated in Report Six (Appendix G). Between Fall 1971 and Fall 1972 seven hundred sixteen, or 24.33% of the students permanently dropped out of school. Between Fall 1972 and 1973, 397 students left; Fall 1973 and 1974, 144; and Fall 1974 and Spring 1975, 38. The total attrition over the four year period was 1295 or 44.00% of the total entering class of 1971. In addition there were 204 students or 6.93% who dropped out of the institution for a period of time but returned. An additional 138 students or 4.69% had graduated by the end of the Fall Quarter of 1974.

In order to get a more accurate picture of the attrition rate of the Fall 1971 Freshman class, a separate student flow run was made following the class over the four quarters from Fall 1974 through Summer 1975. The run indicated that an additional 20 students had dropped out, giving a grand total at the end of

Spring 1975 of 1315, or 44.68% of the students had permanently dropped out. The number of graduations had increased substantially. At the end of Winter Quarter 167 students completed their degree program; 707 Spring; and 101 Summer. This meant that at the end of four complete years 1113, or 37.82% of the students had received a bachelors degree. After subtracting graduates and dropouts, there were 515, or 17.50% of the entering class of 1971 still enrolled either as graduate or undergraduate students.

At the end of the Fall term 1975 the entering class of 1971 will again be examined to determine how many are still enrolled. Then the second portion of the attrition study will be conducted. A sample of the students who have been classified as dropouts will be selected and contacted to determine why they left and whether they transferred to another institution. It is hoped that a complete picture of the dropout can be determined, and in particular how many transferred and completed a degree at another institution.

The history module of the student flow model has proven to be a useful tool in trying to analyze the interaction of students and programs. Its flexibility--especially in allowing for the use of parameters other than student majors--allows for the investigation of other factors which may influence the drop out rate or the speed with which a student will progress through his academic program. The history module also provides the basis for making estimates for future internal shifts of majors within the institution. When this use of the SFM is desired it is preferable that the time periods from which and to which you wish to project, for instance, Fall and Spring semesters be pooled. By grouping several Fall terms and several Spring terms an average transition percentage can be established. This

should provide for a more stable base than using the transition percentages produced by using only one term to another. In preliminary runs the grouping of two Fall and two Winter quarters has produced transition percentages which, when used to project future transition, have yielded very accurate results. A word about the transition and admissions modules is important. The results from them for a one year projection appear to be quite useful; however, when multiple year projections are desired a rather substantial error developed. This is probably due to a programming problem in the way the transition percentages are handled in multiple year runs. Our experience has indicated that the best use of the SFM is to use the history module and then apply the transition percentage by hand to make the specific projection desired. Despite the problem with the admissions and transition modules of the model, the SFM has proven to be a very valuable tool in student analysis and we believe that it will be even more useful in the future.

*****09.48.37*****
* FROM *
* (22) 22 ACT *
* HISTORICAL DATA *
* DISTRIBUTION OF ACT *

COLLEGE	MAJOR	CLASS	(1)FY 71-72 NUMBER PCT. OF OF OBS. TOTAL	(2)FY 72-73 NUMBER PCT. OF OF OBS. TOTAL	(3)FY 73-74 NUMBER PCT. OF OF OBS. TOTAL	(4)FY 74-75 NUMBER PCT. OF OF OBS. TOTAL
(001) ARTS & SCIENCES	(0401) BIOL	(FR/S) FRESHMAN/SPECIAL	19 5.78			
		TOTAL	19			
(0601) CAES		(FR/S) FRESHMAN/SPECIAL	1 0.30			
		TOTAL	1			
(1105) SPANISH		(FR/S) FRESHMAN/SPECIAL	1 0.30			
(008) SPECIAL PRDG	(4998) KASKASKIA	(FR/S) FRESHMAN/SPECIAL	8 2.43			
		TOTAL	8			
		TOTAL	8			
(099) UNCLASSIFIED	(0001) UN/GEN OR	(FR/S) FRESHMAN/SPECIAL	77 23.40			
		TOTAL	77			
		TOTAL	77			
		TOTAL	329 100.00			

COLLEGE	CLASS	(1) FY 71-72 NUMBER OF OBS.	PCT. OF TOTAL	(2) FY 72-73 NUMBER OF OBS.	PCT. OF TOTAL	(3) FY 73-74 NUMBER OF OBS.	PCT. OF TOTAL	(4) FY 74-75 NUMBER OF OBS.	PCT. OF TOTAL
(001) ARTS & SCIENCES	(FR/S) FRESHMAN/SPECIAL	95	28.87						
	TOTAL	95							
(002) APPLIED SCIENCE	(FR/S) FRESHMAN/SPECIAL	30	9.12						
	TOTAL	30							
(003) BUSINESS	(FR/S) FRESHMAN/SPECIAL	43	13.07						
	TOTAL	43							
(004) EDUCATION	(FR/S) FRESHMAN/SPECIAL	38	11.55						
(008) SPECIAL PROG	(FR/S) FRESHMAN/SPECIAL	8	2.43						
	TOTAL	8							
(009) UNCLASSIFIED	(FR/S) FRESHMAN/SPECIAL	77	23.40						
	TOTAL	77							
	TOTAL	329	100.00						

*****09.48.37*
*
* HISTORICAL DATA
* DISTRIBUTION OF COLLEGE

FROM

(FR/S) FRESHMAN/SPECIAL CLASS
(001) ARTS & SCIENCES COLLEGE

MAJOR

(0401) BIOL
(0517) ECCN
(0601) CACS
(1102) FRENCH
(1103) GERMAN
(1105) SPANISH
(1220) SP PA
(1223) M TECH
(1501) ENG
(1505) PHIL
(1701) MATH
(1902) PHYS
(1905) CHEM
(1914) GEOL
(1917) E SCI
(2001) PSYCH
(2205) HIST
(2206) GEOG
(2207) POL SC
(2208) SO-AN

(1) FY 71-72
NUMBER PCT. OF
OF OBS. TOTAL

(2) FY 72-73
NUMBER PCT. OF
OF OBS. TOTAL

(3) FY 73-74
NUMBER PCT. OF
OF OBS. TOTAL

(4) FY 74-75
NUMBER PCT. OF
OF OBS. TOTAL

198 21.40
8 0.90
21 2.30
19 2.10
6 0.70
18 2.00
19 2.10
26 2.80
75 8.20
2 0.20
140 15.20
5 0.50
23 2.50
5 0.50
4 0.40
121 13.20
80 8.70
1 0.10
92 10.00
57 6.20

2 100.00

TOTAL

920 100.00

2 100.00

*****09.48.37*
*
* HISTORICAL DATA
* DISTRIBUTION OF COLLEGE

FROM

(SOPH) SOPHMORE CLASS
(001) ARTS & SCIENCES COLLEGE

MAJOR

(0401) BIOL
(0601) CACS
(1102) FRENCH
(1105) SPANISH
(1501) ENG
(1701) MATH
(2001) PSYCH
(2205) HIST
(2207) POL SC
(2208) SO-AN

(1) FY 71-72
NUMBER PCT. OF
OF OBS. TOTAL

(2) FY 72-73
NUMBER PCT. OF
OF OBS. TOTAL

(3) FY 73-74
NUMBER PCT. OF
OF OBS. TOTAL

(4) FY 74-75
NUMBER PCT. OF
OF OBS. TOTAL

1 33.30
1 33.30
1 33.30

1 100.00

2 16.70
1 8.30
1 8.30
3 25.00
2 16.70
2 16.70
1 8.30

4 50.00
1 12.50
2 25.00
1 12.50

TOTAL

3 99.90

1 100.00

12 100.00

8 100.00

ITER (CO) Y 72 THRU FY 75
REPORT (04) F O U R

WESTERN ILLINOIS UNIVERSITY
NCHEMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 145

*****09.48.37*
*
* HISTORICAL DATA
* TRANSITION FROM MAJOR

FROM

* (FR/S) FRESHMAN/SPECIAL CLASS
* (0401) BICL MAJOR
* (001) ARTS & SCIENCES COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73	NUMBER OF OBS.	PCT. OF TOTAL	FROM (2)FY 72-73 TO (3)FY 73-74	NUMBER OF OBS.	PCT. OF TOTAL	FROM (3)FY 73-74 TO (4)FY 74-75	NUMBER OF OBS.	PCT. OF TOTAL	FROM (4)FY 74-75 TO (1)FY 71-72	NUMBER OF OBS.	PCT. OF TOTAL
(001) ARTS & SCIENCES	(0401) BICL	(FR/S) FRESHMAN/SPECIAL		4	2.00									
		(SOPH) SOPHOMORE		97	49.20		1	25.00						
		(JUN) JUNIOR		4	2.00									
		TOTAL		105	53.20		1	25.00						
(1220) SP PA		(SOPH) SOPHOMORE		1	0.50									
		TOTAL		1	0.50									

ITER (CO) Y 72 THRU FY 75
REPORT (04) F O U R

WESTERN ILLINOIS UNIVERSITY
NCHEMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 148

*****09.48.37*
*
* HISTORICAL DATA
* TRANSITION FROM MAJOR

FROM

* (FR/S) FRESHMAN/SPECIAL CLASS
* (0401) BICL MAJOR
* (001) ARTS & SCIENCES COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73	NUMBER OF OBS.	PCT. OF TOTAL	FROM (2)FY 72-73 TO (3)FY 73-74	NUMBER OF OBS.	PCT. OF TOTAL	FROM (3)FY 73-74 TO (4)FY 74-75	NUMBER OF OBS.	PCT. OF TOTAL	FROM (4)FY 74-75 TO (1)FY 71-72	NUMBER OF OBS.	PCT. OF TOTAL
(EXIT) EXITING STUDENTS				60	30.30		1	25.00						
(DRCP) DROPPED STUDENT				6	3.00		1	25.00						
(TEMP) TEMPORARY EXIT														
		TOTAL		66	33.30		2	50.00						
		TOTAL		198	100.00		4	100.00						

*****09.48.37*
* HISTORICAL DATA
* TRANSITION FROM COLLEGE

FROM

*(FR/S) FRESHMAN/SPECIAL CLASS

*(001) ARTS & SCIENCES COLLEGE

COLLEGE	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73		FROM (2)FY 72-73 TO (3)FY 73-74		FROM (3)FY 73-74 TO (4)FY 74-75		FROM (4)FY 74-75 TO (1)FY 71-72	
		NUMBER OF OBS.	PCT. OF TOTAL	NUMBER OF OBS.	PCT. OF TOTAL	NUMBER OF OBS.	PCT. OF TOTAL	NUMBER OF OBS.	PCT. OF TOTAL
(001) ARTS & SCIENCES	(FR/S) FRESHMAN/SPECIAL	20	2.20						
	(SOPH) SOPHOMORE	537	58.40	7	35.00	1	50.00		
	(JUN) JUNIOR	10	1.10	1	5.00				
	TOTAL	567	61.70	8	40.00	1	50.00		
(002) APPLIED SCIENCE	(FR/S) FRESHMAN/SPECIAL	1	0.10						
	(SOPH) SOPHOMORE	22	2.40						
	(JUN) JUNIOR	1	0.10						
	TOTAL	24	2.60						
(008) SPECIAL PROG	(SOPH) SOPHOMORE	1	0.10						
	TOTAL	1	0.10						
(099) UNCLASSIFIED	(SOPH) SOPHOMORE	2	0.20						
	TOTAL	2	0.20						
(EXIT) EXITING STUDENTS	**TOTAL**	266	28.90	11	55.00	1	50.00		
	TOTAL	920	100.00	20	100.00	2	100.00		

ITER (CO) Y 72 THRU FY 75
REPORT (06) S I A

APPENDIX P
WESTERN ILLINOIS UNIVERSITY
NCHMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 450

*****09.48.37*
*
* HISTORICAL DATA
* SOURCE OF STUDENTS FOR MAJOR

TO

* (FR/S) FRESHMAN/SPECIAL CLASS
* (0401) BIOL MAJOR
* (001) ARTS & SCIENCES COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73	FROM (2)FY 72-73 TO (3)FY 73-74	FROM (3)FY 73-74 TO (4)FY 74-75	FROM (4)FY 74-75 TO (1)FY 71-72
			NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL
(NEW)NEW STUDENTS	130	130				7 3.50
		TOTAL				198 100.00
		TOTAL	4 100.00			198 100.00

TO

* (SOPH) SOPHOMORE CLASS
* (0401) BIOL MAJOR
* (001) ARTS & SCIENCES COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73	FROM (2)FY 72-73 TO (3)FY 73-74	FROM (3)FY 73-74 TO (4)FY 74-75	FROM (4)FY 74-75 TO (1)FY 71-72
			NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL	NUMBER PCT. OF OF OBS. TOTAL
(001)ARTS & SCIENCES	(0401)BIOL	(FR/S)FRESHMAN/SPECIAL	97 74.40	1 10.00		
		(SOPH)SOPHOMORE		7 70.00		
		TOTAL	97 74.40	8 80.00		
	(1701)MATH	(FR/S)FRESHMAN/SPECIAL	1 0.80			
		TOTAL	1 0.80			

ITER (C0) Y 72 THRU FY 75
REPORT (06) S I X

APPENDIX G
WESTERN ILLINOIS UNIVERSITY
NCHEMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 731

*****09.48.37*
*
* HISTORICAL DATA *
* SOURCE OF STUDENTS FOR MAJOR *

TO

(DROP) DROPPED STUDENT MAJOR
(EXIT) EXITING STUDENTS COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73 NUMBER PCT. OF OF OBS. TOTAL	FROM (2)FY 72-73 TO (3)FY 73-74 NUMBER PCT. OF OF OBS. TOTAL	FROM (3)FY 73-74 TO (4)FY 74-75 NUMBER PCT. OF OF OBS. TOTAL	FROM (4)FY 74-75 TO (1)FY 71-72 NUMBER PCT. OF OF OBS. TOTAL
(099) UNCLASSIFIED	(0001) UN/GEN OR	(FR/S) FRESHMAN/SPECIAL (SOPH) SOPHOMORE	168 23.30	5 1.30 19 4.80	2 1.40	1 2.60
		TOTAL	168 23.30	24 6.10	2 1.40	1 2.60
		TOTAL	168 23.30	24 6.10	2 1.40	1 2.60
		TOTAL	716 100.00	397 100.00	144 100.00	38 100.00

ITER (C0) Y 72 THRU FY 75
REPORT (06) S I X

WESTERN ILLINOIS UNIVERSITY
NCHEMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 738

*****09.48.37*
*
* HISTORICAL DATA *
* SOURCE OF STUDENTS FOR MAJOR *

TO

(TEMP) TEMPORARY EXIT MAJOR
(EXIT) EXITING STUDENTS COLLEGE

COLLEGE	MAJOR	CLASS	FROM (1)FY 71-72 TO (2)FY 72-73 NUMBER PCT. OF OF OBS. TOTAL	FROM (2)FY 72-73 TO (3)FY 73-74 NUMBER PCT. OF OF OBS. TOTAL	FROM (3)FY 73-74 TO (4)FY 74-75 NUMBER PCT. OF OF OBS. TOTAL	FROM (4)FY 74-75 TO (1)FY 71-72 NUMBER PCT. OF OF OBS. TOTAL
(099) UNCLASSIFIED	(0001) UN/GEN OR	(FR/S) FRESHMAN/SPECIAL (SOPH) SOPHOMORE	19 16.50	1 1.70 2 3.30		
		TOTAL	19 16.50	3 5.00		
		TOTAL	19 16.50	3 5.00		
		TOTAL	116 100.00	60 100.00	28 100.00	

ETER (CO) Y 72 THRU FY 75
REPORT (07) S E V E N

APPENDIX H
WESTERN ILLINOIS UNIVERSITY
NCHEMS STUDENT FLOW MODEL

10/24/75 FALL 76
HISTORY MODULE (SFIA30) PAGE 745

*****09.48.37*****		1 TO		* (FR/S) FRESHMAN/SPECIAL CLASS		*****	
HISTORICAL DATA		*		*		*****	
SOURCE OF STUDENTS FOR COLLEGE		*		* (001) ARTS & SCIENCES COLLEGE		*****	
*****		*****		*****		*****	
COLLEGE	CLASS	FROM	FROM	FROM	FROM	FROM	FROM
		(1)FY 71-72	(2)FY 72-73	(3)FY 73-74	(4)FY 74-75	(1)FY 71-72	(1)FY 71-72
*****	*****	TO	TO	TO	TO	TO	TO
		(2)FY 72-73	(3)FY 73-74	(4)FY 74-75	(1)FY 71-72	(1)FY 71-72	(1)FY 71-72
*****	*****	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF
		OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL
(001)ARTS & SCIENCES	(FR/S)FRESHMAN/SPECIAL	20 100.00					
		-----	-----	-----	-----	-----	-----
*****	**TOTAL**	20 100.00					
		-----	-----	-----	-----	-----	-----
(NEW)NEW STUDENTS	**TOTAL**		2 100.00			920 100.00	
		-----	-----	-----	-----	-----	-----
*****	***TOTAL***	20 100.00	2 100.00			920 100.00	
		-----	-----	-----	-----	-----	-----
		*****		*****		*****	
		TO	* (SOPH) SOPHOMORE CLASS	*****		*****	
			*	*****		*****	
			* (001) ARTS & SCIENCES COLLEGE	*****		*****	
		*****		*****		*****	
COLLEGE	CLASS	FROM	FROM	FROM	FROM	FROM	FROM
		(1)FY 71-72	(2)FY 72-73	(3)FY 73-74	(4)FY 74-75	(1)FY 71-72	(1)FY 71-72
*****	*****	TO	TO	TO	TO	TO	TO
		(2)FY 72-73	(3)FY 73-74	(4)FY 74-75	(1)FY 71-72	(1)FY 71-72	(1)FY 71-72
*****	*****	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF	NUMBER PCT. OF
		OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL	OF OBS. TOTAL
(001)ARTS & SCIENCES	(FR/S)FRESHMAN/SPECIAL	537 73.10	7 13.00	1 8.30			
		-----	-----	-----	-----	-----	-----